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RESERVE

Water Supply Outlook For Idaho



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
June 1, 1982

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: Lone Cone, near Norwood, Colorado, blanketed by its winter mantle of snow.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR IDAHO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG

ADMINISTRATOR
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Released by

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STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

A. KENNETH DUNN

DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

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Report prepared by

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SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
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WATER SUPPLY OUTLOOK for IDAHO



GENERAL STATEMENT FOR JUNE 1, 1982

The water supply for Idaho is forecast to be good to excellent throughout the State. Snow course measurements near June 1, indicate the snow-pack conditions range from near average in Northern Idaho to well above average in the southern part of the State.

Cool temperatures during the month of May have delayed or slowed the runoff. In general streamflows are expected to remain near to well above normal through June and the early part of July. Flows in late summer and fall should also remain near or above normal.

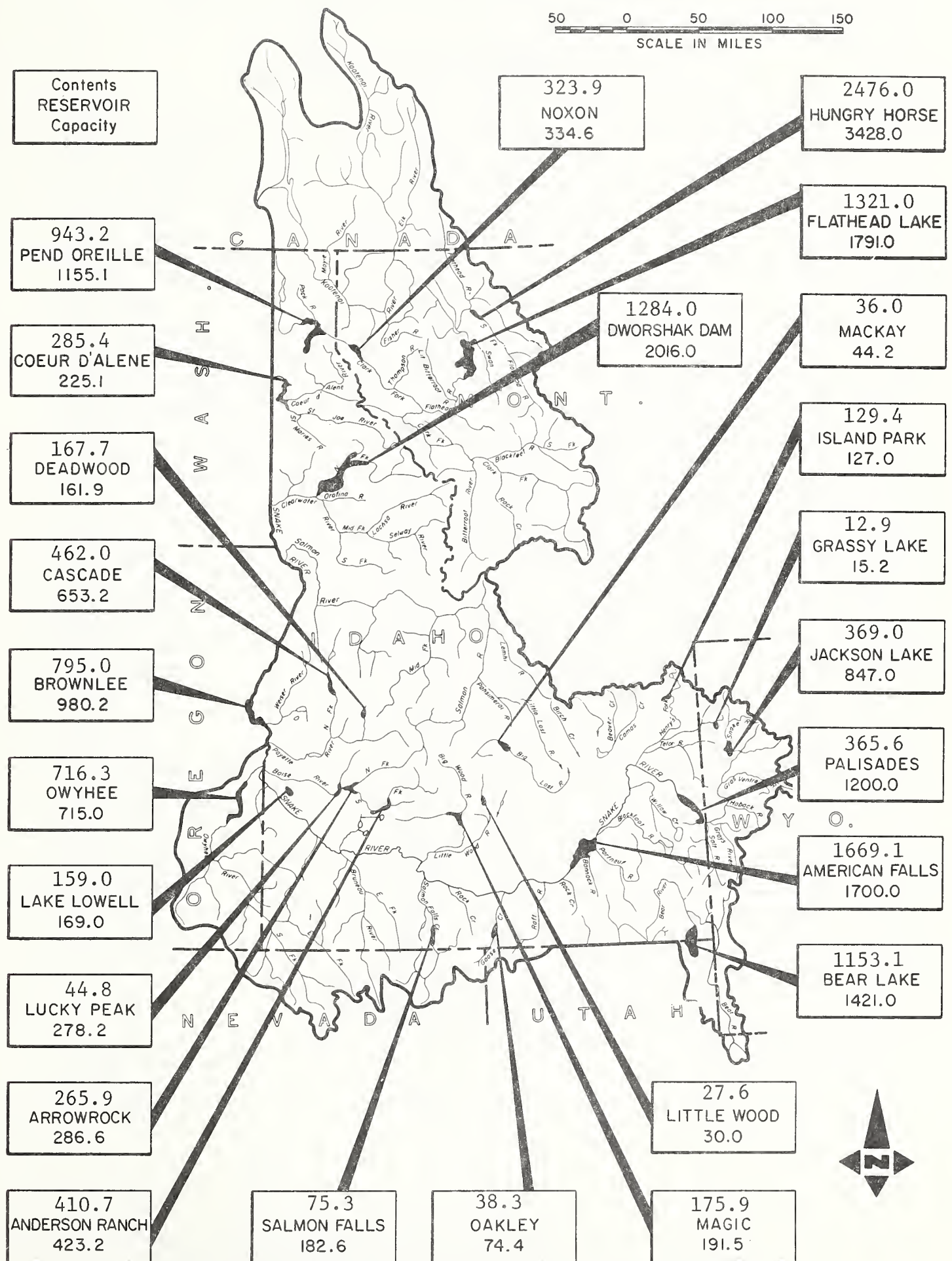
Most major reservoirs are full or nearing capacity. Exceptions are Lucky Peak, Palisades, Jackson Lake, and Oakley Reservoirs which vary from seventeen percent to fifty-nine percent of capacity. Nearly all reservoirs will fill by mid or late June. Due to ample supply of water and cool weather lasting through May and into June, water for irrigation demands will probably be less than normal and thus good carryover in most reservoirs can probably be expected next fall.

The outlook for June calls for below normal temperatures which will continue to delay the snow melt. Access to areas above 7,000 feet may be hampered by snow until late June or early July. People interested in accessing high elevation areas are advised to contact the local Forest Service office to obtain current conditions.

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

JUNE 1982



SNOW		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ¹ / ₄

JUNE 1, 1982 MEASUREMENTS

Atlanta Summit	7600	6/1	78	39.2	6.8	20.5*
Atlanta Townsite	5280	6/1	0	0.0	--	--
Banner Summit	7040	6/1	56	28.1	--	--
Big Creek Summit	6580	5/29	65	36.7	10.5	18.6
Bogus Basin	6340	6/2	0	0.0	--	3.5
Breezy Saddle	5010	6/1	0	0.0	0.0	--
Brundage Mountain	7560	5/28	95	49.2	18.2	36.9*
Coolwater Mountain	6040	6/1	82	34.7	5.2	16.4*
Cozy Cove	5380	6/1	0	0.0	--	--
Crater Meadows	5960	6/1	69	37.8	8.0	32.0*
Crawford Ranger Station	4860	5/29	0	0.0	0.0	--
Deadwood Airstrip	5360	6/1	0	0.0	--	--
Deadwood Summit	6860	6/1	88	48.0	14.8	--
Dollarhide Summit	8420	6/1	62	30.1	--	--
Elk Butte	5550	6/1	17	6.8	0.0	10.7*
Freds Mountain (Wy)	8150	5/28	48	20.0	4.8	--
Galena	7440	5/27	0	0.0	0.0	2.6*
Galena Summit	8780	5/27	49	24.0	10.3	13.9*
Goat Lake	6500	6/1	89	40.4	17.1	36.8*
Graham Guard Station	5690	6/1	0	0.0	--	--
Graham Ranch	6270	5/27	3	1.4	0.0	--
Granite Peak	6000	6/1	85	35.8	9.4	31.5*
Hemlock Butte	5810	6/2	80	35.6	3.3	30.9*
Jackson Peak	7070	6/1	52	26.6	4.4	11.9*
Lake Fork	5290	5/29	0	0.0	0.0	--
Lookout	5140	6/1	34	18.2	0.0	15.0*
Lost Lake	6110	6/1	108	49.6	16.2	46.4*
Moores Creek Summit	6100	6/2	47	24.2	20.2	12.5
Schweitzer Bowl	4800	6/1	16	9.3	13.2	--
Schwetizer Ridge	6200	6/1	79	41.8	11.2	--
Secesh Summit	6520	5/29	70	35.2	0.0	--
Shanghai Summit	4570	6/2	0	0.0	0.0	--
Squaw Meadow	5900	5/29	63	34.0	0.0	15.3*
Trinity Mountain	7770	6/1	78	42.7	9.5	25.7*
Vienna Mine	8960	6/1	91	48.3	17.5	29.4*
Willow Flat	6070	5/26	0	0.0	--	--

SUPPLEMENTAL MEASUREMENTS

December 15, 1981

Lost Wood Divide	7900	12/15	41	10.6	--	--
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(b) 1963-77, 15 year period. # Not located directly on this drainage. * Estimated 1963-77 15 year average. (V) Verinal observation. Water content estimated. (SP) Pressure Pillon snow-water equivalent. (R) Radiometric Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average ¹

SUPPLEMENTAL MEASUREMENTS (Continued)January 15, 1982

Aspen Grove	6500	1/13	32	9.5	--	--
Bad Bear	4940	1/18	45	11.4	3.7	--
Birch Creek	6800	1/13	24	5.7	--	--
Blue Ridge	6780	1/12	50	14.4	--	--
Bogus Basin	6340	1/18	52	14.3	4.7	--
Bogus Basin Road	5540	1/18	29	6.5	0.0	--
Bone	6200	1/12	21	5.4	--	--
Brockman Station	6430	1/11	29	7.2	--	--
Couch Summit	6840	1/11	50	11.7	--	--
Crawford Ranger Station	4860	1/10	24	5.1	--	--
Crooked Fork	3610	1/15	32	7.2	2.0	--
Darby Canyon (Wy)	8250	1/13	66	17.8	--	--
Fish Lake Airstrip	5650	1/20	101	22.7	8.2	--
Galena	7440	1/18	60	16.2	8.2	--
Galena Summit	8780	1/18	66	19.3	8.8	--
Hemlock Butte	5810	1/20	114	28.1	7.7	--
Idaho City	4000	1/18	29	7.2	--	--
Indian Meadows	8240	1/14	90	27.7	--	--
Jackpine Creek (Wy)	7350	1/14	51	15.0	--	--
Lava Creek (Hell Creek)	7350	1/11	44	12.1	--	--
Little Camas Flat	4940	1/11	29	8.0	--	--
Lolo Pass	5240	1/15	62	14.6	6.4	--
McRenolds Reservoir	6720	1/14	49	14.8	--	--
Moore's Creek Summit	6100	1/18	84	20.9	20.7	--
Mud Creek	7100	1/12	52	15.3	--	--
Rammel Ridge	8240	1/14	90	25.4	--	--
Shanghai Summit	4570	1/20	67	15.7	0.0	--
Sheep Mountain	6570	1/12	35	9.8	0.0	--
Squaw Meadow	5900	1/9	72	21.8	--	--
Tex Creek	6650	1/11	29	6.9	--	--
Twitchell Canyon	6300	1/13	43	11.8	--	--
Willow Flat	6070	1/11	46	11.2	--	--

February 15, 1982

Bogus Basin	6340	2/16	61	18.7	10.0	--
Bogus Basin Road	5540	2/16	30	9.5	0.0	--
Crooked Fork	3610	2/16	43	13.3	4.8	--
Fish Lake Airstrip	5650	2/18	108	34.3	11.6	--
Galena	7440	2/17	75	21.2	11.1	--
Galena Summit	8780	2/16	84	24.4	12.4	--
Hemlock Butte	5810	2/18	134	41.5	14.4	--
Lolo Pass	5240	2/16	82	26.5	10.8	--
Shanghai Summit	4570	2/18	69	22.3	4.1	--

(b) 1963-77, 15 year period. # Not located directly on this drainage. ¹ Estimated 1963-77 15 year Average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^{1/2}

SUPPLEMENTAL MEASUREMENTS (Continued)

March 15, 1982

Above Burke	4100	3/15	56	20.0	8.4	--
Atlanta Summit	7600	3/16	113	41.7	17.6	--
Atlanta Townsite	5280	3/16	36	13.6	4.2	--
Bad Bear	4940	3/15	45	17.1	4.3	--
Bogus Basin	6340	3/15	70	26.7	10.0	--
Crooked Fork	3610	3/15	37	13.1	0.0	--
Elk Butte	5550	3/16	107	34.6	11.7	--
Fish Lake Airstrip	5650	3/16	117	41.9	17.1	--
Fourth of July Summit	3200	3/15	19	5.5	--	--
Galena	7440	3/12	70	23.3	11.9	--
Galena Summit	8780	3/12	88	28.5	16.8	--
Hemlock Butte	5810	3/16	151	52.4	18.1	--
Humboldt Gulch	4250	3/15	47	15.0	--	--
Idaho City	4000	3/15	16	6.9	--	--
Jackson Peak	7070	3/16	100	36.9	18.2	--
Lolo Pass	5240	3/15	90	31.0	12.8	--
Lookout	5140	3/15	95	35.0	17.2	--
Lost Lake	6110	3/16	170	55.0	27.2	--
Moore's Creek Summit	6100	3/15	102	40.4	15.1	--
Pierce Ranger Station	3080	3/16	33	12.1	--	--
Prairie	4800	3/15	15	6.1	0.0	--
Savage Pass	6170	3/15	97	33.5	15.6	--
Shanghai Summit	4570	3/16	76	27.0	4.2	--
Sherwin	3200	3/15	39	15.0	0.0	--
Trinity Mountain	7770	3/16	128	52.0	21.3	--
Vienna Mine	8960	3/16	120	47.6	21.8	--

April 15, 1982

Atlanta Summit	7600	4/16	141	53.0	21.8	--
Bad Bear	4940	4/16	45	17.8	0.0	--
Black Canyon	7960	4/12	126	51.0	0.0	--
Black Moose	8160	4/12	141	58.2	0.0	--
Bogus Basin	6340	4/15	84	29.8	0.0	--
Crooked Fork	3610	4/15	36	13.1	0.0	--
Elk Butte	5550	4/16	114	38.8	18.2	--
Fish Lake Airstrip	5650	4/16	134	45.4	23.7	--
Fourth of July Summit	3200	4/15	7	1.6	--	--
Galena	7440	4/16	82	29.0	15.3	--
Galena Summit	8780	4/16	107	38.2	19.7	--
Giveout	6860	4/15	54	20.5	--	--
Hemlock Butte	5810	4/16	163	55.4	27.4	--
Idaho City	4000	4/16	0	0.0	--	--
Jackson Peak	7070	4/16	115	43.6	23.1	--

(b) 1963-77, 15 year period. # Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillon snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average ⁶

SUPPLEMENTAL MEASUREMENTS (Continued)

Latham Springs	7630	4/12	111	44.2	--	--
Little Beaver	6970	4/15	59	23.8	--	--
Lolo Pass	5240	4/15	93	35.4	17.9	--
Lookout	5140	4/15	113	41.4	21.2	--
Lost Lake	6110	4/16	194	64.4	37.5	--
Lower Home Canyon	7640	4/15	57	21.4	--	--
Lucky Dog	6860	4/12	96	38.4	--	--
Montpelier Creek	6540	4/15	28	10.8	--	--
Moore's Creek Summit	6100	4/16	119	44.0	20.2	--
Prairie	4800	4/15	3	1.2	0.0	--
Shanghai Summit	4570	4/16	88	30.2	8.3	--
Slug Creek Divide	7230	4/15	67	25.7	--	--
Trinity Mountain	7770	4/15	158	63.4	27.7	--
Vienna Mine	8960	4/16	148	59.9	27.4	--
Upper Home Canyon	8560	4/15	95	39.0	--	--
Whiskey Flat	6960	4/15	40	14.7	--	--

May 15, 1982

Atlanta Summit	7600	5/13	106	48.5	--	--
Atlanta Townsite	5280	5/13	0	0.0	--	--
Bogus Basin	6340	5/14	48	23.0	0.0	--
Crater Meadows	5960	5/14	103	48.2	19.5	--
Elk Butte	5550	5/14	60	24.2	0.0	--
Galena	7440	5/13	40	16.2	0.0	--
Galena Summit	8780	5/13	76	33.2	13.4	--
Hemlock Butte	5810	5/14	118	49.4	16.3	--
Jackson Peak	7070	5/13	82	37.1	--	--
Lookout	5140	5/14	72	32.2	8.6	--
Lost Lake	6110	5/14	146	61.8	26.5	--
Moore's Creek Summit	6100	5/14	82	37.8	2.6	--
Shanghai Summit	4570	5/14	38	17.2	0.0	--
Trinity Mountain	7770	5/13	114	57.2	18.3	--
Vienna Mine	8960	5/13	116	56.4	--	--

DELAYED MEASUREMENTS - 1982January 1, 1982

Buck Meadows	5650	1/3	60	16.9	--	14.9*
Packsaddle Springs	8200	12/28	51	14.3	--	--
Soldier Ranger Station	5740	1/6	45	8.3	5.3	4.9*

February 1, 1982

Bruno	7920	2/2	63	17.9	--	--
Buck Meadows	5650	2/5	88	27.7	--	20.2*

(b) 1963-77, 15 year period. # Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average

DELAYED MEASUREMENTS - 1982 (Continued)March 1, 1982

Buck Meadows	5650	3/5	89	33.1	--	25.8*
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May 1, 1982

Bruno	7920	5/3	60	25.9	--	--
Kruze Meadow	4780	5/3	27	12.3	--	--

CORRECTIONS TO PREVIOUSLY PUBLISHED 1982 DATAFebruary 1, 1982

Mud Creek	7100	2/1	59	18.8	13.7	--
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March 1, 1982

Cub River	5450	2/23	23	8.1	4.9	8.4
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April 1, 1982

Brockman Station	6430	3/29	35	8.5	0.0	--
Lava Creek (Hell Creek)	7350	3/29	66	23.9	8.8	--
McRenolds Reservoir	6720	3/31	66	22.6	11.3	--
Rammel Ridge	8240	3/31	132	51.3	22.3	--
Sheep Mountain	6570	3/29	52	18.5	6.2	13.9*
Tex Creek	6650	3/29	43	13.8	7.6	9.7*

(b) 1963-77, 15 year period. * Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pilon snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
Forest Service
ESCS Crop Reporting Service
SEA Agricultural Research

U. S. Department of Commerce
NOAA, National Weather Service

U. S. Department of the Interior
Bonneville Power Administration
Water and Power Resources Service
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

Washington Water Power Company
Idaho Power Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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